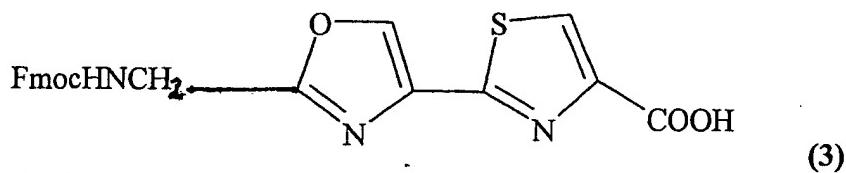


IN THE CLAIMS:

1. (Cancelled)
2. (Cancelled)

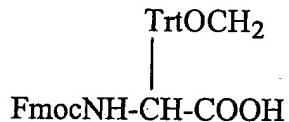
3. (Currently Amended)

An method for producing a *N*-protected oxazole and thiazole amino acid comprising the structure of:

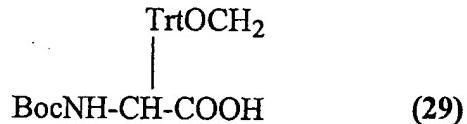


which comprises:

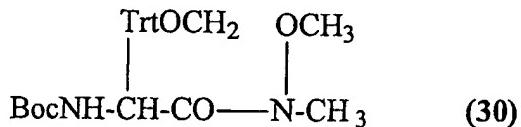
removing the Fmoc protective group of



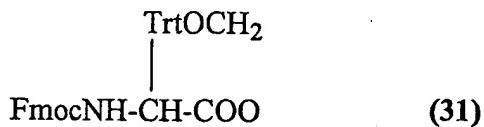
to produce



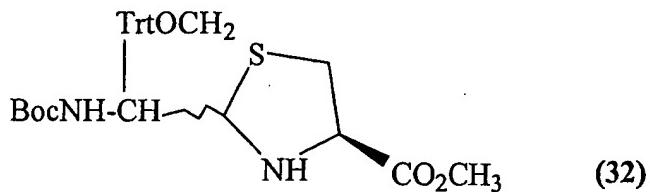
effecting a reaction with (29) to produce



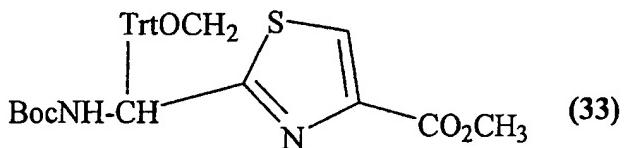
reducing (30) to produce



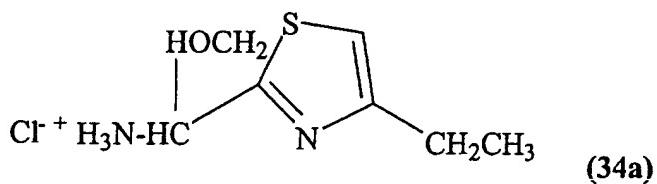
condensing (31) to produce



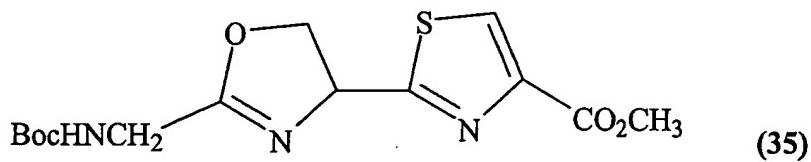
dehydrogenating (32) to produce



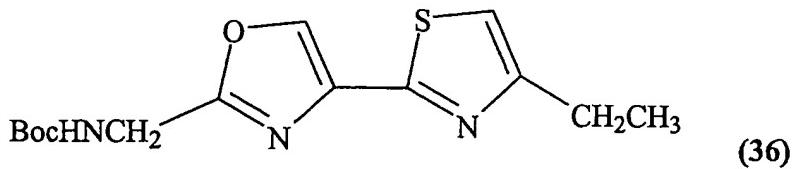
removing the Boc and Trt protecting groups to produce



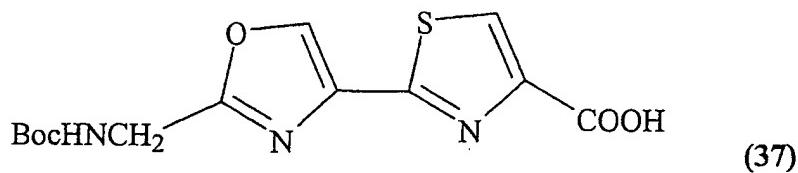
effecting a reaction with (34a) to produce



dehydrogenating (35) to produce



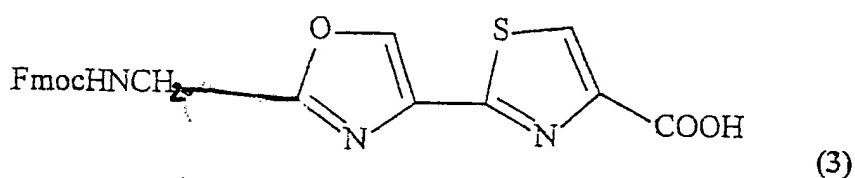
hydrolyzing (36) to produce



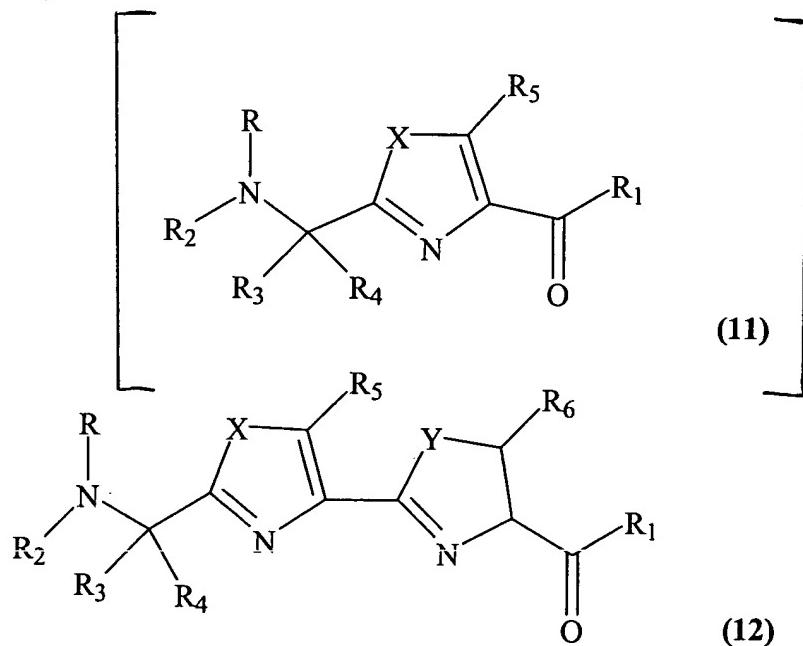
converting the Boc protective group of (37) to a Fmoc protecting group to produce (3).

4. (Currently Amended)

A *N*-protected oxazole and thiazole amino acid comprising the structure of:



5. (Currently Amended) A combinatorial library, of at least two compounds, each compound within the library being derived from the solid phase peptide combinatorial synthesis of at least one compound selected from the group consisting of:



where R and R₂ = H, a naturally occurring or synthetic L or D amino acid, *Tert*butyloxycarbonyl (Boc), 9-fluorenylmethoxycarbonyl (Fmoc), carbobenzoxy (Z), Benzoyl (Bz), and other like amino protecting groups;

where R₁ = OH, alkyl esters, aromatic esters such as methyl, ethyl, *t*-butyl and benzyl, a naturally occurring or synthetic L or D amino acid, activated esters such as pentafluorophenyl, nitrophenyl, N-hydroxysuccinimide, acid chlorides, fluorides, organic salts, such as cyclohexyamines (CHA), amides, an amide bonded to a [linker] linker such as a diamine, or an insoluble support for use in solid phase synthesis;

where R_{3,4} = C₁-C₁₀ alkyl, a heterocyclic ring, an aliphatic or aromatic ring, a functional group such as an amine, an alcohol, a halide or an organometallic complex

where $R_{5-6} = H$;

where $X = \text{oxygen (O) or sulfur (S)}$;

where $Y = \text{oxygen (O) or sulfur (S)}$;

wherein at least one of the compounds selected from the group consisting of 11 and 12 forms an amide bond with at least one of the compounds selected from the group consisting of 11 and 12 or a naturally occurring or synthetic amino acid.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)